

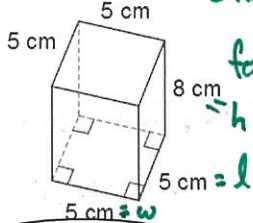
NAME: _____ TP: _____

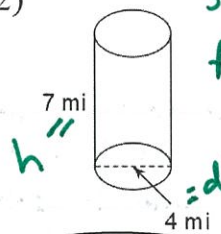
HW#84 Volume of Prisms and Cylinders

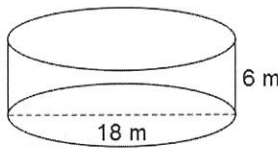
Geometry: DUE Thursday, April 16th, 2014

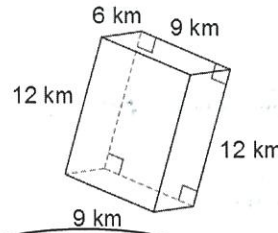
Failure to show all work will result in a LaSalle.

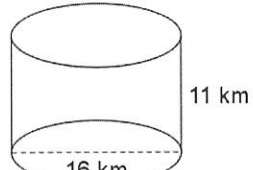
Find the **volume** of each figure. Round your answers to the nearest hundredth, if necessary. Leave your answers in terms of π for answers that contain π . (The first four have answers given – you need to show the work to find the answers!)

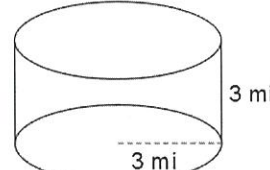
1)  Shape: rect prism
formula: $V = l \cdot w \cdot h$
 $V = (5)(5)(8)$
 $V = 200 \text{ cm}^3$

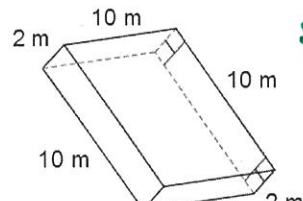
2)  Shape: right cylinder
formula: $\pi r^2 h$
 $r = \frac{d}{2} = \frac{4}{2} = 2$
 $V = \pi (2)^2 \cdot 7$
 $V = \pi 4 \cdot 7$
 $V = 28\pi \text{ mi}^3$

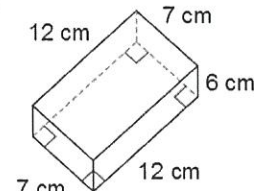
3)  Shape: _____
formula: _____
 $V = 486\pi \text{ m}^3$

4)  Shape: _____
formula: _____
 $V = 648 \text{ km}^3$

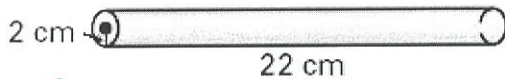
5)  Shape: _____
formula: _____

6)  Shape: _____
formula: _____

7)  Shape: _____
formula: _____

8)  Shape: _____
formula: _____

9a) Find the volume of the right cylinder given a radius of 2cm and a length 11 times as long as the radius. (Keep π for your answer.)



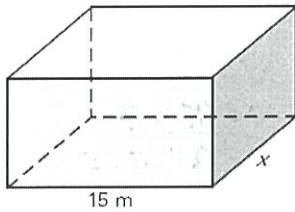
shape:

formula:

9b) Find the surface area for the cylinder to the left.

shape:
formula:

10) Find the length x using the given volume $V = 1440 \text{ m}^3$

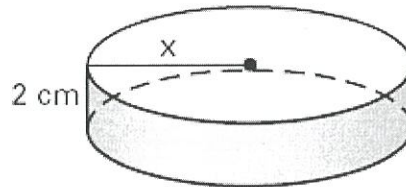


① Write formula for Volume of this shape
② Use info to solve for x

$x =$ _____

Find the surface area. ③ Formula of a
④ Solve

11) Find the length x using the given volume $V = 72\pi \text{ cm}^3$



Repeat steps from #10

$x =$ _____

Find the surface area.

Spiraled Review: Show all work!

1. In a group of 25 students, 16 are female. What percentage of the group is female?

- a. 16%
- b. 40%
- c. 56%
- d. 60%
- e. 64%
- f. 75%

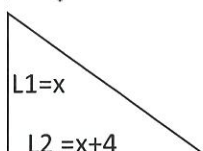
2. The regular price for a certain bicycle is \$125.00. If that price is reduced by 20%, what is the new price?

- a. \$25.00
- b. \$100.00
- c. \$105.00
- d. \$112.50
- e. \$120.00
- f. \$122.50

3. Let's try this again, with a drawing & work started.

One leg of a right triangle is 4 inches longer than its other leg. The sum of the lengths of the two legs is 10 inches. What is the area, in square inches, of the triangle?

- F. 9
- G. 10.5
- H. 15
- J. 17.5
- K. 21



$$L1 + L2 = 10$$

4. If the problem to the left started "One leg of a right triangle is 4 times as long as its other leg" and everything else stayed the same, what would the area be? Draw, label, and solve.